

## REMARKS

The issues outstanding in the Office Action mailed October 24, 2006, are the double patenting rejection and rejections under 35 U.S.C §§102 and 103. Reconsideration of these issues, in view of the following discussion, is respectfully requested.

### Double Patenting

As noted below, the U.S. '070 patent is equivalent to the PCT application cited in the rejections under 35 U.S.C §§102 and 103. Accordingly, for the reasons advanced below in overcoming the rejections under 35 U.S.C §§ 102 and 103, it is apparent that the U.S. patent does not render the present claims obvious. Withdrawal of the obviousness-type double patenting rejection should also be made, in view of the following discussion.

### Rejection under 35 U.S.C. § 102

Claims 1-11 have been rejected under 35 U.S.C. §102(b) over WO 99/20695. Reconsideration of this rejection is respectfully requested. It is noted that this publication is equivalent to the Schmidt '070 patent. For purposes of convenience, the disclosure of the '070 patent will be referred to in the following discussion.

As will be recalled, Schmidt discloses interference pigments on the basis of multiply coated, platelet-shaped substrates, which comprise at least one layer sequence comprising:

- (A) a coating having a refractive index  $n \geq 2.0$ ,
- (B) a colourless coating having a refractive index  $n \geq 1.8$ , and
- (C) a nonabsorbing coating of high refractive index, and, if desired,
- (D) an external protective layer.

Patentees disclose, moreover, a particularly preferred embodiment that is the coating of the substrate with the following layer assembly:

- (S1) optional,  $\text{SnO}_2$
- (A)  $\text{TiO}_2$  or  $\text{Fe}_2\text{O}_3$
- (B)  $\text{SiO}_2$

(B1) optional,  $\text{SnO}_2$

(C)  $\text{TiO}_2$

(D) Final coating related to application

Patentees further teach, at column 2, at lines 55-63, that "suitable base substrates" for the pigments are "firstly opaque and secondly transparent" platelet-shaped substrates. This disclosure is followed a list of both transparent and opaque materials.

The examples of the '070 disclose mica as the substrate, with Examples 1 and 2 being four layer coatings, with iron as a first layer, Example 3 containing an iron-containing (thus, colored) layer, Example 5 also containing such a layer and Example 6 containing two such iron-containing layers. Thus, no example anticipates the present claims, which recite a five layer sequence having, as the third layer, a colorless coating, and moreover, having two layers of titanium dioxide in rutile modification. To the extent that the Office Action, accordingly, relies on the "preferred embodiment" at column 4 of the patent, and even to the extent that one of ordinary skill in the art on viewing the disclosure of " $\text{TiO}_2$ " would envision rutile from among other modifications, a point which applicants do not concede, it is evident that significant choices must still be made, which take this disclosure out of the realm of anticipatory. For example, layer (A) of the preferred embodiment at column 4 is titanium dioxide *or*  $\text{Fe}_2\text{O}_3$ . Moreover, it is not disclosed that the substrate is *directly* coated with this layer sequence, nor is it disclosed that the substrate is transparent and colorless. Accordingly, one of ordinary skill in the art not only has to choose titanium dioxide for layer (A), but has to choose rutile modification for layers (A) and (C), must choose a transparent and colorless substrate from among the opaque and colored substrates listed as noted above, and must apply this sequence directly to that substrate without an intermediate layer.

Moreover, it is noted that the present claims require specifically defined thickness values. While, granted, it could arguably be possible for one of ordinary skill in the art to judiciously select some of these values from the broad disclosure of the reference (although it is noted that the "interlayers" in the reference are not shown as having values below 1 nm, contrary to the 0.5 nm values at the bottom of the range in the present claims) such a

judicious selection of overlapping portions of ranges in each of the minimum of five layers of the present claims, along with the above-discussed selections, does not rise to the level of an anticipation. See, for example, *In re Sivaramakrishnan*, 673 F.2d 1382, 213 USPQ 441 (CCPA 1982).

It is noted that the present specification discloses the use of transparent and colorless substrates, among others, for example, at page 3, lines 19-26. Moreover, application of the layer sequence directly to the substrate is performed in all examples in accordance with the invention. Accordingly, although explicit verbal support for these features may not be present in the specification, it is clear that possession of these features is unequivocally taught to one of ordinary skill in the art and, consequently, explicit recitation thereof is supported under the rationale of *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976).

Accordingly, it is respectfully maintained that the disclosure of Schmidt is simply not focused enough to support an anticipation rejection under 35 U.S.C. §102, and withdrawal thereof is respectfully requested.

#### Rejections Under 35 U.S.C §103

Claims 1-11 have also been rejected under 35 U.S.C §103 over the Schmidt '695. Reconsideration of this rejection is again respectfully requested. It is maintained that the selection of thicknesses, and direct application of at least one layer sequence to the transparent and colorless results in pigments having significantly increased brightness, greater luster, a more pronounced color flop and higher stability compared to the referenced pigments. As a result, the submitted pigments of the reference do not suggest the present claims, and withdrawal of the rejection is respectfully requested.

The claims of the application are submitted to be in condition for allowance. However, if the Examiner has any questions or comments, he is cordially invited to telephone the undersigned at the number below.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,

/Harry B. Shubin/

Harry B. Shubin, Reg. No. 32,004  
Attorney/Agent for Applicant(s)

MILLEN, WHITE, ZELANO  
& BRANIGAN, P.C.  
Arlington Courthouse Plaza 1, Suite 1400  
2200 Clarendon Boulevard  
Arlington, Virginia 22201  
Telephone: (703) 243-6333  
Facsimile: (703) 243-6410

Attorney Docket No.: MERCK-2715

Date: March 13, 2007

HBS:ske K:\Merck\2000 - 2999\2715\Amendment 3-13-07.doc